• Applicant revision to Section 30 to reflect turbine change to Siemens SWT-2.3 (6/17/09)

REVISED EXECUTIVE SUMMARY

Terrence J. DeWan & Associates has evaluated Section 30: Visual Impact of Generating Facility of the Record Hill Wind Project MDEP NRPA/Site Location of Development Combined Application in light of the proposed change in the selected wind turbine. Record Hill Wind LLC is now proposing to use the Siemens SWT- 2.3 – 93 wind turbines. The previously assessed turbines were the Clipper Liberty C96.

Revised Overview

The Siemens SWT- 2.3 – 93 turbines will be mounted on the same 80-meter towers but will have 93-meter diameter rotors instead of the 96-meter diameter rotors that had been specified for the Clipper Liberty C96. The Siemens rotor diameter will be approximately 3% smaller than the original Clipper Liberty turbine. This represents a relatively minor change to the overall appearance and visibility of the turbines, especially since most of the decreased blade length will be lost at the tip, which is the least visible component of the blade in the mid-ground and background viewing distances.

The total height of a turbine with the blade fully extended will be 126.5 meters (approximately 415 feet). The Siemens turbines will be approximately 1.5 m (5± feet) shorter in overall height than the Clipper Liberty C96, or a difference of slightly more than 1%. This represents a very minor change in the overall appearance and visibility of the turbine.

All components of the turbine will still be painted white. The number and location of the turbines will remain the same. The Siemens turbines will have a 2.3-MW capacity, which is 0.2 MW less than the 2.5 MW capacity of the Clipper Liberty C96. The new turbine will still be subject to the same Federal Aviation Administration requirements for lighting. Access to the Project site will not change as a result of the new turbine selection. The 34.5 kV collector lines and substation will not change.

The proposed decrease in turbine size will not significantly affect their visibility from any of the identified scenic resources within 8 miles of the project. Scenic resources that would continue to have unobstructed views of the entire wind project include portions of the summits of Tumbledown Mountain and Little Jackson Mountain and the trails immediately below their summits (located between 5.8 and 7.0 miles from the closest turbine) and the Old Blue Mountain viewpoint on the Appalachian National Scenic Trail (located 7.8 miles from the closest turbine). Due to the effects of distance, atmospheric perspective, and the relative thinness of the turbine blades, the change in visibility from a 96m-diameter-rotor to a 93m-diameter rotor will be negligible from these viewpoints. Visual impacts on these resources are anticipated to continue to be minor to moderate due to the distances from the wind project and the scale of the surrounding landscape

There are four structures on the National Register of Historic Places within eight miles of the project area. Since the wind project will not be visible from any of them, the change in turbine type will not affect them.

There are two river segments that are noted for their scenic value by the <u>Maine Rivers Study</u>: 1) the Swift River, paralleling Route 17 on the east side of the project area, between 1.5 and 2.5 miles from the turbines, and 2) the West Branch of the Ellis River in Andover, 5.5 miles west of the Project. Visual impacts of the proposed Siemens SWT-2.3-93 turbines on the rivers will continue to be minor (West Branch of the Ellis River) to moderate (where visible from the Swift River). At no point along these rivers will there be an opportunity to see the entire wind project.

There are no lakes or ponds identified by the state as 'Significant or Outstanding'. There are no State Parks, National Parks (with the exception of a 2-mile segment of the Appalachian Trail), national natural landmarks, or other comparable outstanding natural or cultural features within eight miles that will be affected by the project.

Section 30: MDEP NRPA/Site Location of Development Combined Application (Revised) Record Hill Wind Project, Oxford County, Maine

Conclusion

The substitution of the Clipper Liberty C96 turbines with the Siemens SWT 2.3-93 turbines will not change the overall visual impacts for the Record Hill Wind Project. A 1% decrease in the overall height of the turbines will seem relatively insignificant, given the scale of the surrounding mountains and the typical viewing distances. The majority of the visual impacts to the scenic resources of state or national significance will continue to be on the summits of Tumbledown and Little Jackson Mountains, at distances of 6-7± miles from the nearest turbine, and a viewpoint on the Appalachian Trail at a distance of nearly 8 miles. Visual impacts to these resources will continue to be moderate. Several of the turbines will continue to be intermittently visible from the Swift River and the West Branch of the Ellis River, both of which have been rated for their scenic value.

As with the previous proposed turbines, the SWT 2.3-93 turbines will not be visible from any lakes or ponds that have been rated as significant or outstanding for scenic resources. The turbines will not be visible from any State Parks within eight miles, Maine Department of Transportation scenic turnouts, national natural landmarks, or scenic viewpoints located in the coastal area. Throughout the majority of the study area, views of the project are blocked by topography and roadside vegetation.

The Project continues to be designed to have minimal visual impacts on scenic resources. The Project will not have an unreasonable adverse impact on scenic values and existing uses of scenic resources of state or national significance.

JOHN ELIAS BALDACCI Governor MARTHA E. FREEMAN Director

From: Todd Burrowes, State Planning Office ("SPO")

To: Beth Callahan, Department of Environmental Protection ("DEP")

RE: Response to DEP request for comments; Record Hill wind energy project

Date: June 5, 2009

This memo responds to your May 6, 2009, request for SPO's comments regarding public comments on the pending application to DEP for the Record Hill wind energy project that:

- Great ponds in the project area, Roxbury Pond (also known as Ellis Pond) and Little Ellis Pond
 (also known as Garland Pond), "were over-looked" in the Maine's Finest Lakes report (SPO, 1989)
 and should be re-evaluated in terms of their relative scenic resource value; and
- Statutory provisions regarding DEP review of applications for grid-scale wind energy development enacted by P.L. 2007 c. 661, An Act to Implement Recommendations of the Governor's Task Force on Wind Power Development, conflict with "SPO's guidance on Regional Landscape Conservation in Maine and Chapter 208."

Maine Finest Lakes report

35-A M.R.S. §3451(9) defines "scenic resources of state or national significance" as including a "great pond that is one of the 66 great ponds located in the State's organized area identified as having outstanding or significant scenic quality in the 'Maine's Finest Lakes' study published by the Executive Department, State Planning Office in October 1989." Accordingly, these comments are based on and limited to review of this published report.

The Maine Finest lakes study involved assessment of great ponds of 10 acres or more in size for a number of different natural resources-related values, one of which was scenic quality. As stated in *Maine's Finest Lakes: The Results of the Maine Lakes Study* (SPO, October, 1989) ("Report"), the study report referenced by the above definition, the Report's anticipated potential uses included statewide planning and DEP land use permit review. Report, p. 182.

In its findings, the Report indicates that there are 66 lakes identified as having "outstanding" or "significant" scenic quality. See Report, p. 23. Appendix D of the Report identifies the 66 lakes having significant or outstanding scenic quality. In its table indicating the study's findings for each lake assessed, Appendix D identifies a lake with "outstanding" scenic quality with an "O" and a lake with "significant" scenic quality with an "S." See Report, Appendix D.

The list of lakes identified as having significant or outstanding scenic quality is different than the shorter list of "outstanding lakes of the organized townships" (the overall "finest" lakes as assessed by this study) described in the Report at pages 32 ff. These "finest" lakes are those that under the study methodology detailed in the Report were "judged to have cumulative resource values that are of statewide

significance." Report, p. 32. As may be seen from review of Appendix D, not all of the lakes identified as having outstanding or significant scenic quality were judged to have cumulative resource values that are of statewide significance and thus not all are included among the "outstanding lakes of the organized townships."

Roxbury Pond and Little Ellis Pond are not among the lakes "identified as having outstanding or significant scenic quality" in Appendix D of the Report. Roxbury Pond and Little Ellis Pond are both listed among the lakes assessed during the study. Report, p. 5 of Appendix D. For each lake studied, the assessment results detailed in Appendix D indicate whether the lake was found to be "significant" or "outstanding" for each category assessed. "A blank indicates either that the lake did not meet the study's minimum standards for that particular resource or there was inadequate information to draw conclusions." Report, p. 221, (Appendix D).

The methodology for evaluating lakes' scenic quality is detailed on pages 202 ff. of the report. The Report indicates that this methodology was used in assessing each lake's scenic quality. As explained in the Report, due to budget limitations, the study methodology limited site visits to those lakes that met applicable screening criteria. *See* Report, p. 203. The methodology's evaluation process, which is explained on page 204 of the Report, states that only those lakes that met the "minimum standards" regarding topographical and landscape features (*see* Report, p. 203) would be evaluated in the field by visiting the lake in a float plane.

Work regarding the Maine lakes study, the results of which are published in the Report, has been completed. A number of years ago, the Legislature eliminated SPO's Critical Areas Program, for which the Report was prepared. The Program's functions regarding plant and animal habitat were basically merged into the work of the Department of Conservation's Maine Natural Areas Program and Department of Inland Fisheries and Wildlife, respectively, while functions regarding physical features, such as waterfalls and unique geologic areas, and scenic qualities were not. SPO does not have any on-going, current lakes assessment program or initiative. SPO has no legislative direction or funding or other plans to support reevaluation of the relative scenic or other qualities of Roxbury Pond or other great ponds.

It is important to note that, regardless of any potential merit in doing so, further assessment of the scenic quality of Roxbury Lake or other great ponds and subsequent amendment of the Report to identify them as having "outstanding or significant scenic quality" would not alter the above-noted definition of "scenic resources of state or national significance." Change of that definition would require legislative action to amend the statute.

Regional Landscape Conservation in Maine

Regional Landscape Conservation in Maine is a document prepared in 2008 as a compendium of "best practices" for regional landscape conservation in Maine. SPO prepared and published this document as guidance for municipalities' use and consideration at their discretion and it is not enforceable.

SPO Rules, Chapter 208

Chapter 208 lays out the process and criteria that SPO uses to review local comprehensive plans for consistency with 30-A M.R.S., Subpart 6-A, Planning and Land Use Regulation (also known as the Growth Management Act). A consistent comprehensive plan lays the groundwork for municipal decisions in the

areas of zoning and ordinance development, among others. Municipal land use ordinances and zoning adopted pursuant to a local comprehensive plan, not provisions of Chapter 208, are the enforceable elements of municipal land use policy. SPO's Chapter 208 rules are not intended to apply to DEP's permitting decisions.